

AMENDMENTS TO THE CLAIMS:

The following listing of claims replaces all prior versions, and all prior listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A tooth bleaching composition comprising titanium dioxide in an amount of 0.001 to 10% by weight, the titanium dioxide initiating photocatalytic action with light irradiation, a chemical compound generating hydrogen peroxide in an aqueous solution, and a thickening agent, in an amount of 1 to 5% by weight, the composition having a viscosity in a range of 1,000 to 100,000 centipoise, wherein the thickening agent is selected from the group consisting of a layer-structure clay mineral, phosphoric acid and phosphate.

2. (Original) The tooth bleaching composition according to claim 1, wherein titanium dioxide is anatase type, rutile type or brookite type.

3. (Previously Presented) The tooth bleaching composition according to claim 1, wherein the chemical compound generating hydrogen peroxide in an aqueous solution is selected from the group consisting of hydrogen peroxide, perborate, percarbonate, persulfate, perphosphate, calcium peroxide, magnesium peroxide and urea peroxide.

4. (Original) The tooth bleaching composition according to claim 3, wherein the chemical compound generating hydrogen peroxide in an aqueous solution is hydrogen peroxide.

5. (Cancelled).

6. (Cancelled).

7. (Original) The tooth bleaching composition according to claim 5, wherein the phosphate is tetra-sodium pyrophosphate.

8. (Previously Presented) The tooth bleaching composition according to claim 1, wherein the content of the chemical compound generating hydrogen peroxide in an aqueous solution is 35% by weight or less.

9. (Previously Presented) A method for bleaching a discolored tooth comprising applying the tooth bleaching composition according to claim 1 onto the surface of a discolored tooth and irradiating the applied surface with light.

10. (Original) The method according to claim 9, wherein the wavelength of the irradiating light is 300 nm or longer.

11. (Previously Presented) The tooth bleaching composition according to claim 2, wherein the chemical compound generating hydrogen peroxide in an

aqueous solution is selected from the group consisting of hydrogen peroxide, perborate, percarbonate, persulfate, perphosphate, calcium peroxide, magnesium peroxide and urea peroxide.

12. (Previously Presented) The tooth bleaching composition according to claim 11, wherein the chemical compound generating hydrogen peroxide in an aqueous solution is hydrogen peroxide.

13.-14. (Cancelled).

15. (Previously Presented) The tooth bleaching composition according to claim 13, wherein the phosphate is tetra-sodium pyrophosphate.

16. (Previously Presented) The tooth bleaching composition according to claim 15, wherein the content of the chemical compound generating hydrogen peroxide in an aqueous solution is 35% by weight or less.

17. (Previously Presented) A method for bleaching a discolored tooth comprising applying the tooth bleaching composition according to claim 16 onto the surface of a discolored tooth and irradiating the applied surface with light.

18. (Previously Presented) The method according to claim 17, wherein the wavelength of the irradiating light is 300 nm or longer.

19. (Previously Presented) The tooth bleaching composition according to claim 14, wherein the content of the chemical compound generating hydrogen peroxide in an aqueous solution is 35% by weight or less.

20. (Previously Presented) A method for bleaching a discolored tooth comprising applying the tooth bleaching composition according to claim 19 onto the surface of a discolored tooth and irradiating the applied surface with light.

21. (Previously Presented) The tooth bleaching composition according to claim 1, which further includes water.

22. (Previously Presented) The tooth bleaching composition according to claim 21, wherein said chemical compound generating hydrogen peroxide in an aqueous solution is hydrogen peroxide.

23. (Previously Presented) The tooth bleaching composition according to claim 22, wherein said thickening agent is hectorite.

24. (Previously Presented) A method for bleaching a discolored tooth comprising applying the bleaching composition according to claim 23 onto the surface of a discolored tooth and irradiating the applied surface area with light.

25. (Previously Presented) The tooth bleaching composition according to claim 23, wherein the hydrogen peroxide is included in the composition in an amount of 10% by weight or less.

26. (Previously Presented) The tooth bleaching composition according to claim 1, wherein the titanium dioxide is particulate titanium dioxide coated with calcium phosphate.

27. (Previously Presented) The tooth bleaching composition according to claim 1, wherein the titanium dioxide is in particulate form, having a particle diameter of 1 to 500 nm.

28. (Previously Presented) The tooth bleaching composition according to claim 1, wherein the amount of titanium dioxide in the composition is in a range of 0.01 to 1% by weight.

29. (Previously Presented) The tooth bleaching composition according to claim 1, wherein the amount of titanium dioxide in the composition is in a range of 0.01 to 0.1% by weight.

30. (Previously Presented) The tooth bleaching composition according to claim 1, wherein the viscosity of the composition is in a range of 5,000 to 50,000 centipoise.

31. (New) The tooth bleaching composition according to claim 1, wherein the thickening agent is said layer-structure clay material.

32. (New) A method for bleaching a discolored tooth comprising applying the tooth bleaching composition according to claim 31 onto the surface of a discolored tooth and irradiating the applied surface with light.